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10/614,330	07/08/2003	Kwang-Il Jung	P-0486	7340
34610	7590	08/01/2007	EXAMINER	
KED & ASSOCIATES, LLP			MILLER, BRANDON J	
P.O. Box 221200			ART UNIT	
Chantilly, VA 20153-1200			PAPER NUMBER	
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**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

**Application No.**

10/614,330

**Applicant(s)**

JUNG, KWANG-IL

**Examiner**

Brandon J. Miller

**Art Unit**

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 03 May 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 13-23 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 13-23 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

**DETAILED ACTION**

***Response to Amendment***

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 13-23 are rejected under 35 U.S.C. 103(a) as being unpatentable over Agrawal et al. (US 7,139,285 B2) in view of Cousins (US 2001/0029544 A1).

Regarding claim 13 Agrawal teaches a data transmission system (see col. 2, lines 50-53). Agrawal teaches a master device and a slave device coupled to the master device through a Bluetooth connection (see col. 2, lines 50-58). Agrawal teaches wherein data packets are transmitted between the master device and the slave device through the Bluetooth connection, and the slave transmits the data packets via an air interface (see col. 2, lines 65-67 and col. 3, lines 12-24). Agrawal does not specifically teach a computer device and a modem device, and a modem device for accessing the Internet. Cousins teaches a computer device and a modem device (see paragraph [0027]). Cousins teaches the modem device transmitting the data packets via an air interface for accessing the Internet (see paragraph [0027]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a computer device and a modem device, and a modem device for accessing the Internet because both references teach communicating data packets between multiple devices (see

Art Unit: 2617

Agrawal, col. 2, lines 12-24 and Cousins, see paragraph [0027]) and the combination would allow for improved simultaneous transmission of data packets between multiple devices (see Agrawal, col. 1, lines 31-34).

Regarding claim 14 Agrawal and Cousins teach a device as recited in claim 13 except for wherein the modem comprises a radio transmitting system which includes a multi-access system that allows a plurality of computers to access at least one radio communication system. Agrawal does teach a slave device comprising a radio transmitting system (see col. 2, lines 55-57).

Agrawal also does teach a multi-access system (see col. 3, lines 12-24). Cousins does teach a modem including a multi-access system that allows a plurality of computers to access at least one communication system (see paragraph [0027]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the modem comprises a radio transmitting system which includes a multi-access system that allows a plurality of computers to access at least one radio communication system because both references teach communicating data packets between multiple devices (see Agrawal, col. 2, lines 12-24 and Cousins, see paragraph [0027]) and the combination would allow for improved simultaneous transmission of data packets between multiple devices (see Agrawal, col. 1, lines 31-34).

Regarding claim 15 Cousins teaches wherein the computer is a laptop (see paragraph [0027] and FIG. 1).

Regarding claim 16 Agrawal and Cousins teach a device as recited in claim 13 except for wherein the modem comprises at least one radio communication terminal; and a multi-access system between the radio communication terminal and computer. Agrawal does teach a radio

Art Unit: 2617

communication terminal (see col. 2, lines 55-57). Agrawal also does teach a multi-access system between a master device and a slave device (see col. 3, lines 12-24). Cousins does teach a modem including a multi-access system that allows a plurality of computers to access a communication terminal (see paragraph [0027]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the modem comprises at least one radio communication terminal; and a multi-access system between the radio communication terminal and computer because both references teach communicating data packets between multiple devices (see Agrawal, col. 2, lines 12-24 and Cousins, see paragraph [0027]) and the combination would allow for improved simultaneous transmission of data packets between multiple devices (see Agrawal, col. 1, lines 31-34).

Regarding claim 17 Agrawal and Cousins teach a device as recited in claim 16 except for wherein the multi-access system sends data packets belonging to a same call from the computer for wireless transmission through a plurality of radio communication terminals. Agrawal does teach a multi-access system that sends data packets belonging to a same call from a master device for wireless transmission through a plurality of communication terminals (see col. 3, lines 12-24). Cousins does teach wherein the multi-access system sends data packets belonging to a same call from the computer for transmission through a communication terminal (see paragraph [0027]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the multi-access system sends data packets belonging to a same call from the computer for wireless transmission through a plurality of radio communication terminals because both references teach communicating data packets between multiple devices (see Agrawal, col. 2, lines 12-24 and Cousins, see paragraph [0027])

Art Unit: 2617

and the combination would allow for improved simultaneous transmission of data packets between multiple devices (see Agrawal, col. 1, lines 31-34).

Regarding claim 18 Agrawal and Cousins teach a device as recited in claim 18 except for wherein the multi-access system sends the data packets through the plurality of radio communication terminals based on a same destination IP address and a same data link address, the same data link address corresponding to a computer. Agrawal does teach a multi-access system sending data packets through a plurality of radio communication terminals based on a same destination address and a same data link address (see col. 3, lines 52-67). Cousins does teach a data link address corresponding to a computer (see paragraph [0033]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the multi-access system sends the data packets through the plurality of radio communication terminals based on a same destination IP address and a same data link address, the same data link address corresponding to a computer because both references teach communicating data packets between multiple devices (see Agrawal, col. 2, lines 12-24 and Cousins, see paragraph [0027]) and the combination would allow for improved simultaneous transmission of data packets between multiple devices (see Agrawal, col. 1, lines 31-34).

Regarding claim 19 Agrawal teaches a system for receiving data packets from a plurality of devices (see col. 3, lines 12-24). Agrawal teaches a packet-call connection system for interfacing with one or more radio communication terminals (see col. 3, lines 12-24). Agrawal teaches a multi-access routing system for routing data packets from the multimedia system to the radio communication terminals according to a slot assignment method (see col. 4, lines 38-49).



Art Unit: 2617

Agrawal does not specifically teach a multimedia system and receiving data packets from computers. Agrawal does teach radio devices transmitting packet data (see col. 2, lines 65-67). Cousins does teach receiving data packets from computers (see paragraph [0027]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a multimedia system and receiving data packets from computers because both references teach communicating data packets between multiple devices (see Agrawal, col. 2, lines 12-24 and Cousins, see paragraph [0027]) and the combination would allow for improved simultaneous transmission of data packets between multiple devices (see Agrawal, col. 1, lines 31-34).

Regarding claim 20 Agrawal and Cousins teach a device as recited in claim 19 except for wherein the slot assignment method is set by the plurality of computers. Agrawal does teach a slot assignment method (see col. 4, lines 38-49). Cousins does teach addressing set by computers (see paragraph [0033]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include wherein the slot assignment method is set by the plurality of computers (see Agrawal, col. 2, lines 12-24 and Cousins, see paragraph [0027]) and the combination would allow for improved simultaneous transmission of data packets between multiple devices (see Agrawal, col. 1, lines 31-34).

Regarding claim 21 Agrawal teaches performing a one-on-one assignment for mapping each of the devices to a respective one of the radio communication terminals; and a common sharing method for allowing each device to share the plurality of radio communication terminals for transmitting data packets (see col. 3, lines 12-24 & 52-67). Agrawal does not specifically teach computers. Cousins does teach a computer (see paragraph [0027]). It would have been

Art Unit: 2617

obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a computer because both references teach communicating data packets between multiple devices (see Agrawal, col. 2, lines 12-24 and Cousins, see paragraph [0027]) and the combination would allow for improved simultaneous transmission of data packets between multiple devices (see Agrawal, col. 1, lines 31-34).

Regarding claim 22 Agrawal teaches a plurality of physical data link control circuits provided in one-to-one correspondence with the plurality of devices, each of the physical data link control circuits controlling a corresponding physical data link (see col. 4, lines 9-18).

Agrawal does not specifically teach a TCP/IP control circuit to perform a TCP/IP protocol function on data packets transmitted from the plurality of physical data link control circuits; a command/response control circuit for performing/responding to a command of the computers transmitted from the TCP/IP control circuit; and a data control circuit for sorting and buffering data transmitted from the TCP/IP control circuit. Cousins teaches a TCP/IP control circuit to perform a TCP/IP protocol function on data packets transmitted from a plurality of physical data link control circuits (see paragraphs [0029] - [0033]). Cousins teaches a command/response control circuit for performing/responding to a command of the computers transmitted from the TCP/IP control circuit (see paragraph [[0029] - [0033]). Cousins teaches a data control circuit for sorting and buffering data transmitted from the TCP/IP control circuit [0021]).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include a TCP/IP control circuit to perform a TCP/IP protocol function on data packets transmitted from the plurality of physical data link control circuits; a command/response control circuit for performing/responding to a command of the computers



Art Unit: 2617

transmitted from the TCP/IP control circuit; and a data control circuit for sorting and buffering data transmitted from the TCP/IP control circuit because both references teach communicating data packets between multiple devices (see Agrawal, col. 2, lines 12-24 and Cousins, see paragraph [0027]) and the combination would allow for improved simultaneous transmission of data packets between multiple devices (see Agrawal, col. 1, lines 31-34).

Regarding claim 23 Agrawal teaches setting a slot assignment method according to a command of at least one of the devices, assigning a slot to one of the devices according to a set slot assignment method, and routing data packets associated with a same call between the one of the master devices and slave devices based on the destination address and the data link address associated with each of the packets (see col. 3, lines 12-24 & 52-67). Agrawal does not specifically teach computers setting slot assignments. Cousins does teach computers setting IP assignments (see paragraph [0033]). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device adapt to include computers setting slot assignments because both references teach communicating data packets between multiple devices (see Agrawal, col. 2, lines 12-24 and Cousins, see paragraph [0027]) and the combination would allow for improved simultaneous transmission of data packets between multiple devices (see Agrawal, col. 1, lines 31-34).

Art Unit: 2617

***Claim Rejections - 35 USC § 112***

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 13-16 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The “modem” limitation recited in claims 13-16 is not described or even mentioned in the specification. Therefore the “modem” limitation is not described in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

The above art rejection is based upon the best possible interpretation of the claim language in light of the rejected under 35 U.S.C. 112, first paragraph.

***Response to Arguments***

Applicant's arguments with respect to claims 13-23 have been considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

### *Conclusion*

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Anandakumar et al. U.S Patent No. 6,804,244 B1 discloses an integrated circuit for packet communications.

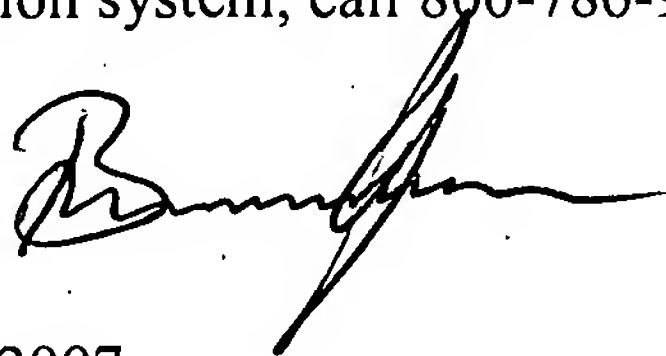
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brandon J. Miller whose telephone number is 571-272-7869.

The examiner can normally be reached on Mon.-Fri. 8:00 am to 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, George Eng can be reached on 571-272-7495. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2617

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to be "B. Smith", written over a horizontal line.

July 26, 2007

A handwritten signature in black ink, appearing to be "George Eng", written in a cursive style.

GEORGE ENG  
SUPERVISORY PATENT EXAMINER